Ethnocultural Aspects of Posttraumatic Stress Disorder

Issues, Research, and Clinical Applications

EDITED BY

Anthony J. Marsella
Matthew J. Friedman
Ellen T. Gerrity
Raymond M. Scurfield

4

ETHNOCULTURAL ASPECTS OF PTSD: AN OVERVIEW OF ISSUES AND RESEARCH DIRECTIONS

ANTHONY J. MARSELLA, MATTHEW J. FRIEDMAN, and E. HULAND SPAIN

INTRODUCTION

Interest in ethnocultural aspects of PTSD has grown dramatically in recent years.

Within the last two decades, there has been an increased interest in the study of ethnocultural aspects of posttraumatic stress disorder (PTSD). This interest has manifested itself through the publication of numerous books, technical reports, and journal articles on a spectrum of ethnic populations and ethnic aspects of PTSD. However, during this time period, there have been few literature reviews on the topic, and those literature reviews that have been published have been limited to either specific topics (e.g., assessment); traumas (e.g., refugee status); or ethnic groups (e.g., Indochinese).

Some examples of literature reviews include those by Penk and Allen (1991), who summarized the research literature on clinical assessment among ethnic minority Vietnam War veterans; de Girolamo (1992), who summarized the literature on the treatment and prevention of PTSD among

This chapter was previously published in slightly altered form in J. Oldham, A. Tasman, & M. Riba (Eds.). (1993) American Psychiatric Association Press Review of Psychiatry, Volume 12, American Psychiatric Association, Washington, DC. It is included here with the permission of the American Psychiatric Press.

victims of natural disasters in different countries; Friedman and Jaranson (1992), who summarized the literature on PTSD among refugees; and Marsella, Friedman, & Spain, who offered a brief overview of the topic with an accompanying annotated bibliography (1992), and more detailed analysis (1993).

One reason for the limited number of literature reviews on ethnocultural aspects of PTSD is that the information on the topic is distributed across hundreds of publications and is focused on different (a) ethnocultural groups (e.g., Afro-Americans, American Indians, Asian Americans, Cambodians, Hispanics); (b) victim populations (e.g., war veterans, refugees, torture victims, prisoners-of-war, rape and other crime victims, victims of natural and non-natural disasters); (c) traumatic events (e.g., Vietnam War, Afghan War, Northern Ireland Conflict, Buffalo Creek Disaster, Chernobyl, Three Mile Island, San Ysidro Massacre, refugee camp internment, rapes, other criminal assaults); and (d) clinical topics (e.g., epidemiology, measurement, clinical diagnosis, alternative therapies).

In addition to the problematic nature of surveying, organizing, and critically reviewing such a sizable research and clinical literature, there is the issue of research quality. For example, the majority of ethnocultural studies on PTSD have assumed that by studying one or more racial or ethnocultural groups they were, in fact, accounting for the variance associated with ethnocultural factors. However, as will be pointed out in detail in later sections, a comparison of different races or ethnic groups in the absence of a priori criteria for defining meaningful group divisions limits our understanding of any group differences found.

What does it mean, for example, when Whites, African Americans, American Indians, and Hispanics are found to differ in rates of PTSD if the samples studied also differ in educational level, social class, exposure to trauma, regional background (e.g., Cubans, Puerto Ricans, Mexicans), urban—rural residence, and so forth? Using broad categories of ethnocultural group membership as the basis for research studies may, in fact, create more problems than it resolves. It is essential that clinical studies attributing differences in PTSD rates, expression, and treatment responsivity to ethnocultural variables control for, or at least account for, these and other possible sources of variance.

In addition, there are considerable within-group ethnocultural differences among African Americans, Asians, Hispanics, and Whites, and these differences must be considered in valid cross-cultural research. For example, there is no single African American subculture. There are a variety of African American experiences, and these differ from one another in dramatic ways. Consider the contrasts among African American groups such as Haitians, Black Cubans, Jamaicans, Brazilians, and Ethiopians; Southern-rural Blacks, and Northern-urban Blacks; and wealthy professional, and

impoverished Blacks. PTSD among these different groups may not have similar causes, expressions, or experiential and social implications because these groups are, in fact, different from one another in numerous ways.

In spite of the many publications addressing ethnocultural aspects of PTSD, relatively little is known about the relationship between ethnocultural factors and the etiology, epidemiology, onset, diagnosis, course, outcome, and assessment and treatment of PTSD. The present chapter has three major purposes: (a) to summarize and critically review the existing cross-cultural PTSD literature, especially as it pertains to veterans and refugees, the two groups most frequently studied; (b) to discuss some of the major conceptual and methodological issues involved in understanding the relationship between culture and PTSD; and (c) to recommend conceptual and research approaches for studying ethnocultural aspects of PTSD.

While a universal neurobiological response to traumatic events most likely does exist, there is room for considerable ethnocultural variation in the expressive and phenomenological dimensions of the experience, especially among comorbidity patterns and associated somatic, hysterical, and paranoid symptoms and experiences. The extensive research literature on ethnocultural variations in psychopathology points to the importance of our understanding the pathoplastic aspects of severe psychopathology and other forms of mental disorder. If more sensitive cross-cultural research and clinical methods are used in the study of PTSD, ethnocultural variations may emerge with greater regularity and clarity. Therefore, at this point in time, a number of research questions remain to be answered regarding the relationship between ethnocultural factors and the etiology, rates, expression, experience, and treatment of PTSD. A purpose of this chapter is to examine some of these questions.

AN OVERVIEW OF THE EPIDEMIOLOGICAL AND CLINICAL LITERATURE

Refugees

There are several reviews that have examined mental disorders among populations considered to be at high risk for PTSD (e.g., refugees, immigrants, veterans, concentration camp survivors) that can shed partial light on possible relationships between traumas and the rates and clinical manifestations of PTSD in different ethnocultural populations (e.g., Arthur, 1982; Beiser, 1991; Friedman & Jaranson, 1992; Garcia-Peltoniemi, 1992a, 1992b; Mollica, 1988; Weisaeth & Eitinger, 1991). In addition, the National Center for PTSD Research Quarterly (NC PTSD, 1991) recently

compiled a bibliography of traumatic reactions among Asian and European refugee, concentration camp, and veteran populations.

More recent studies of PTSD, among Indochinese refugees continue to support the close relationship between the traumas associated with refugee status and PTSD and related anxiety and depressive disorders (e.g., Beiser, Turner, & Ganesan, 1989; Boehnlein, 1987a, 1987b; Boehnlein, Kinzie, Rath, & Fleck, 1985; de Girolamo, Diekstra, & Williams, 1989; Friedman & Jaranson, 1992; Goldfeld, Mollica, Pesavento, & Faraone, 1988; Lin, Ihle, & Tazuma, 1985; Kinzie, Boehnlein, Leung, & Moore, 1990; Kinzie, Frederickson, Rath, Fleck, & Karls, 1984; Kroll, Habenicht, MacKenzie, & Yang, 1989; Mollica, 1988; Mollica, Wyshak, & Lavelle, 1987; Moore & Boehnlein, 1991; Nicassio, 1985).

Westermeyer and his coworkers (e.g., Westermeyer, 1988; Westermeyer, Williams, & Nguyen, 1992; Williams & Westermeyer, 1986) have edited and authored a number of books on refugee mental health that contain extensive material on the diagnosis and treatment of PTSD among Indochinese refugees and other groups. Rozee and Van Bomel (1989) looked at the effect of war trauma on older Cambodian women.

An example of the extensive studies on PTSD among Indochinese refugees is provided by Kinzie, Frederickson, Rath, Fleck, and Karls (1984), who surveyed 322 patients at a psychiatric clinic for Indochinese refugees to determine the presence of PTSD. They found that 226 patients met the criteria for a current diagnosis of PTSD, and an additional 15 met the criteria for a past diagnosis. The Mein (Laotian hill people) had the highest rate of PTSD (93%) and Vietnamese refugees had the lowest (54%). The authors concluded that PTSD is a common disorder among Indochinese refugees, but the diagnosis is often difficult to make because of communication difficulties that complicate the diagnostic process.

Cervantes, Salgado de Snyder, and Padilla (1989) investigated self-reported symptoms of depression, anxiety, somatization, generalized distress, and PTSD in a community sample of 258 immigrants from Central America and Mexico and 329 native-born Mexican Americans and Anglo-Americans. Research instruments included the SCL-90-R and the Center for Epidemiologic Studies Depression Scale. The authors found that immigrants had higher levels of generalized distress than native-born Americans. They also found that 52% of Central American immigrants who migrated as a result of war or political unrest reported symptoms consistent with a diagnosis of PTSD, compared with 49% of Central Americans who migrated for other reasons and 25% of Mexican immigrants. Other studies involving Hispanic refugee PTSD victims have been published by Lopez, Boccellari, and Hall (1988); Summerfield and Toser (1991); and Urrutia (1986).

Natural Disasters and Political and Family Traumas

Perry (1986), de Girolamo (1992), and de Girolamo & Orley (1992) summarized much of the literature on the relationship between natural disasters and PTSD across national boundaries. They concluded that natural disasters are an important source of psychiatric adjustment difficulties among survivors regardless of the country in which the disaster occurred. One example of PTSD following a natural disaster was reported by de la Fuente (1990), who evaluated emotional reactions in 573 people (age 18–64 years) associated with the Mexican earthquakes, and found that 32% of the victims displayed PTSD, 19% had generalized anxiety, and 13% had depression. In the same study, he found that of 208 women housed in shelters, 72.3% showed no psychopathological symptoms, 18% displayed some signs of decompensation, and 9.5% suffered severe decompensation.

Holen (1990); Malt (1988); Malt, Blikra, & Hoivik, (1989); and Weisaeth (1989), studied the effects of industrial disasters and civilian accidents among Scandinavian populations. Weisaeth (1989) found a direct relationship between the severity of trauma exposure and PTSD symptoms among survivors of a paint factory explosion in Norway. Immediate PTSD reactions were reported by 80% of the high-stressor-exposure group while only 5% showed a delayed PTSD response. The seven-month-point prevalence of PTSD was 37% among high-stressor-exposure victims but only 4% among low-stressor-exposure victims. The direct relationship between stressor exposure and PTSD among this cultural population is consistent with reports of others around the world and suggests a possible universal relationship between extent of trauma and risk of PTSD symptomatology.

In addition to the work of Holen and Malt and his coworkers on Scandinavian victims of industrial disasters and civilian accidents, there have been many other cross-cultural studies of natural disasters and political and family traumas. For instance, Kim (1987) discussed PTSD-like symptoms among battered housewives in Korea. Solomon (1989) discussed the dynamics of PTSD in South African political detainees. Lima, Pai, Santacruz, and Lozano (1991) evaluated 102 victims of the Armero volcanic eruption and mudslide disaster and found that the majority of the victims met DSM-III-R criteria for PTSD and depression.

American Military Veterans

ţ

t

ί

There have also been numerous recent publications on ethnocultural variations in the rates and clinical phenomenology of PTSD among American military veterans. Studies of PTSD among American Vietnam War veterans have reported conflicting PTSD rates. Some studies suggested Blacks have higher rates of PTSD than Whites or Hispanics (e.g., Allen,

1986; Green, Grace, Lindy, & Leonard, 1991; Laufer, Gallops, & Frey-Wouters, 1984; Parson, 1984; Penk, et al.; 1989).

Parson (1985) has proposed a "tripartite adaptational dilemma" among ethnocultural minority Vietnam War veterans in which the veterans must resolve the triple effects of a "bicultural identity, institutional racism, and residual stress from trauma" in dealing with the war. He suggests an increased risk of PTSD and other psychiatric disorders for ethnocultural minority veterans. Penk and Allen (1991), commenting on possible differences in the rates of PTSD among ethnic groups, stated:

Research has consistently demonstrated that effects of the Vietnam war are more pronounced among the American minorities who served. That is, studies of treatment seeking and non-treatment seeking samples concur in showing higher rates of maladjustment among non-whites than whites. . . . Readjustment needs of any veteran are complex but those of the American minority veterans are compounded by the traditional ethnic minority problems of other stresses produced by prejudice in a segregated and racist society. Racism adds stresses to traumatic experiences. . . . But many clinicians have not comprehended the additional complications experienced by many American minority Vietnam veterans whose stress reactions are increased by their experiences of not being majority culture members. (p. 45)

Marsella, Chemtob, & Hamada (1990) suggested that ethnocultural minority Vietnam veterans might have an increased risk for developing PTSD because of a number of factors, including the following: (a) Ethnocultural minority soldiers were subjected to increased stress because of racial stereotypes, ridicule, and inequitable treatment; (b) they were subjected to increased stress because they were asked to fight against non-white people on behalf of a country that many considered racist; (c) the Vietnamese reminded many of the veterans of family, friends, and other minority groups, thus, they were unable to dehumanize the Vietnamese; and (d) personality and interpersonal style of ethnocultural minority veterans may have had increased levels of stress and reduced coping resources available to them, resulting in a higher risk of PTSD.

However, issues have been raised about the confounding effects of substance abuse problems (e.g., Carter, 1982); early life stressors (e.g., Breslau, Davis, Andreski, and Peterson, 1991); and more severe combat stressors among African Americans. Green, Grace, Lindy, and Leonard (1991) were surprised to find high lifetime PTSD diagnosis probabilities of 42% for Whites and 72% for Blacks, and current PTSD probabilities of 30% for Whites and 47% for Blacks. Linking these differences to the Vietnam War experience, however, was problematic because of confounds arising from status and historical differences between the two groups.

Some studies have suggested that Hispanics are also at increased risk for PTSD (e.g., Becerra, 1982; Escobar et al., 1983). Escobar et al. (1983) noted that PTSD was rarely seen as a discrete entity among Hispanics, but rather was mixed within other DSM–III categories. Pina (1985) also noted both increased risks and diagnostic variations in PTSD among Hispanic veterans.

The National Vietnam Veterans Readjustment Study (NVVRS) study of PTSD rates was a comprehensive national epidemiological survey of current and lifetime prevalence rates of PTSD conducted under contract from the Department of Veterans Affairs (see Kulka et al, 1990). This study offered a comparison of PTSD among White, Black, and Hispanic male and female populations. Other ethnocultural groups were considered too small in number to provide comparative data. The NVVRS study found that Hispanic populations suffered higher current rates of PTSD (28%) than Blacks (19%) or Whites (14%). However, it should be pointed out that when data were controlled for war-zone trauma exposure, differences between White and Black prevalence rate differences disappeared, and White versus Hispanic rate-differences became much smaller. In another analysis of NVVRS data, Jordan et al. (1991) reported that Hispanics were at an increased risk for alcohol and other substance abuse and general anxiety disorder, and African Americans for antisocial personality disorder.

Both of these studies are good examples of the importance of accounting for nonethnocultural factors in ethnocultural research. However, on the other hand, the NVVRS made no effort to use culturally sensitive assessment materials in the determination of cases. Furthermore, the study did not sample American Indian, Asian American, or Pacific Island veterans in sufficient sizes to reach conclusions about the prevalence of PTSD among these groups. As a result, the United States Congress has directed the National Center for PTSD of the Department of Veterans Affairs to study rates of PTSD among ethnocultural groups not included in the study, and to develop culturally sensitive instruments for the detection and differentiation of PTSD among these groups. This study is currently in progress (see Friedman, Marsella, Ashcraft, Keane, & Manson, 1992).

There have been few studies of PTSD among American Indian or Asian American Vietnam War veterans. However, several papers have suggested that minority-status stress, racial prejudice, and identification with Vietnamese people and culture may have increased the risk of PTSD among American Indians (e.g., Barse, 1984; Holm, 1982, 1989; Silver, 1984) and Asian Americans (e.g., Hamada, Chemtob, Sautner, & Sato, 1988; Marsella, Chemtob, & Hamada, 1990). It is noteworthy that Parson (1984) and Allen (1986) feel that the risk of PTSD was enhanced among Black veterans because of their identification with the Vietnamese.

In contrast, there have been numerous studies of PTSD among veterans from other nations including Australia (e.g., Streimer, Cosstick, &

Tennant, 1985; Tennant, Streimer, & Temperly, 1990); Canada (e.g., Stretch, 1990, 1991); Israel (e.g., Solomon, K., 1989; Solomon, Z., 1989; Solomon & Mikulincer, 1987; Solomon, Oppenheimer, & Noy, 1986; Solomon, Weisenberg, Schwartzwald, & Mikulincer, 1987); and Sweden (Kettner, 1972). These studies are not methodologically comparable to the American veteran studies of PTSD, so comparisons of data are difficult. However, they do provide additional demonstrations of the link between PTSD and combat experiences.

Tennant et al. (1990) reported that 19% of the Australian Vietnam War veterans suffered from PTSD. However, limitations in sampling and assessment confounded the results. Stretch (1991) reported a prevalence rate of 65% among self-selected Canadian and some American Vietnam War veterans using PTSD symptomatology as the case index rather than clinical diagnoses. He attributed this exceptionally high rate to lack of recognition, lack of PTSD services, and isolation of veterans in Canada. Solomon and her coworkers (Solomon et al., 1987) reported that 59% of a sample of Israeli soldiers who fought in the 1982 Lebanese conflict had PTSD one year after the end of the war. The variations in these rates are a result of different case criteria and research methodologies. However, as a group, they point to the fact that combat experience is closely linked to PTSD. It should be noted that Solomon and her coworkers have published a score of studies on PTSD among Israeli soldiers, of which interested readers should be aware.

Assessment Studies and Issues

There are only a few published ethnocultural studies of PTSD concerned with assessment issues, in spite of the fact that cultural sensitivity in assessment procedures may be a major factor in the determination of PTSD rates and clinical features (e.g., Penk & Allen, 1991; Penk, Robinowitz, Dorsett, Bell, & Black, 1989). Allodi (1991) reviewed some of the assessment methods used with international torture victims; he reported no efforts to accommodate methods to specific ethnocultural populations. Westermeyer and Wahmemholm (1989) commented on the difficulties of assessing the traumatized combat and refugee patient. Mollica et al., (1992) attempted to develop a questionnaire for measuring trauma, torture, and PTSD among Indochinese refugees using refugee experiences rather than Western standards.

However, most studies of non-White PTSD victim populations have tended to use standard clinical methods. As a result, questions arise about the validity of the conclusions reached because many of these instruments were constructed and normalized with White populations. Nevertheless, it is important to note that consistent symptomatology has been reported with the use of a variety of popular Western psychiatric instruments (e.g.,

SCL-90, DIS, MMPI, CED-S, M-PTSD) across a variety of different ethnocultural groups. A paper by Jaranson and Shiota (1989) is noteworthy because they developed an interview assessment package for specific use with Indochinese refugee PTSD victims.

Therapy Studies

Ţ

Psychotherapy Studies

There have been no systematic comparisons of therapy outcomes or processes among PTSD victims from different cultures using accepted experimental design procedures (e.g., control groups, alternative therapies, multiple outcome measures). However, there have been a number of reports on various therapy experiences with different ethnocultural groups. Some of these indicate the importance of adjusting therapies to the patient's ethnocultural background.

For example, Parson (1990) discusses a special form of PTSD therapy that he used for Black veterans. He called his therapy approach post-traumatic psychocultural therapy (PTpsyCT). In contrast to other therapies, Parson integrated the Vietnam sector, the African/slavery sector, the Eurocentric sector, and the post-Vietnam sector of the Black veterans experiential world. He cited ten basic principles that distinguished PTpsyCT from other psychotherapies. Baumgartner (1986) reported success with Black veterans using sociodrama, a form of group therapy that encourages catharsis. However, he did not specify procedures that would be therapeutically unique to different ethnic groups, nor did he discuss the biases and problems associated with this method among other populations.

Allen (1986) noted that cross-cultural therapy with Black veterans is complicated by a variety of factors including the tendency to misdiagnose Black patients;, the varied manifestations of PTSD in this group; the Black patient's frequent alcohol and drug abuse; and medical, legal, personality, and vocational problems. Allen acknowledges that these factors make it difficult to treat Black veterans using traditional therapeutic approaches.

Krippner and Colodzin (1989) cited the success of using indigenous healers (American Indian and Asian) in treating PTSD among Vietnam War veterans from these groups. They noted that the traditional practitioners used therapies that helped veterans "regain power," "cleanse themselves," and "decrease shame, guilt, and rage." Among American Indians, sweat lodges, vision quests, and other indigenous practices have been used successfully with American Indian veterans. Holm (1982) and Silver and Wilson (1990) reported success with a variety of American Indian purification and healing practices.

Lee and Lu (1989) called attention to the importance of considering ethnocultural factors in the treatment of Asian populations. Their article

discussed functional and dysfunctional coping strategies of Asian immigrants and refugees and offers some principles for the psychiatric assessment of Asian immigrants and refugees who may have PTSD. Culturally specific treatment strategies were discussed, including (a) crisis intervention; (b) supportive, behavioral, and psychopharmacological approaches; (c) amytal and hypnosis; and (d) folk healing. Niem (1989) also noted some of the problems and possibilities associated with the use of Western psychiatric therapies among Vietnamese refugee populations.

Boehnlein (1987a, 1987b) discussed the importance of considering cultural factors in PTSD therapy with Cambodian women who were concentration camp survivors. He stressed that attention to cultural factors helped provide more comprehensive and valid diagnostic and treatment formulations. Kinzie and Fleck (1987) described their therapy experiences with four severely traumatized refugees from different Indochinese countries. They noted therapeutic problems include the setting in which therapy takes place, reactivation of PTSD, lack of objectivity by the therapist, and the failure of the therapist to provide effective assistance with the immediate social and urgent financial needs of the refugees.

Jaranson (1990); Kinzie, (1985, 1989); Kinzie and Fleck (1987); Kinzie, Tran, Breckenridge, and Bloom (1980); Mollica and Lavelle (1988); Rosser (1986), and Westermeyer (1989) all noted that counseling and psychotherapy adjusted for the ethnocultural traditions of Indochinese refugees can be helpful in reducing traumatic stress. They urge increased sen-

sitivity to cultural factors in treatment procedures.

Dobkin de Rios and Friedmann (1987) used a culturally sensitive hypnotherapeutic intervention for Hispanic burn patients with symptoms of PTSD because of the difficulties that recent monolingual Mexican migrants experience in responding to psychological interventions that are culturally insensitive. A combination of the hypnotherapeutic interventions, systematic desensitization, and other culturally sensitive therapeutic activities helped the effective rehabilitation of Hispanic burn patients. Arredondo, Orjucla, and Moore (1989) discussed the value of family therapy in treating Central American war refugees who have suffered traumas.

Although many countries have torture rehabilitation centers that are heavily concerned with PTSD, there are no comparative reports of the therapeutic effectiveness of different approaches (e.g., psychoanalysis vs. behavior modification) as a function of ethnocultural variables. Research on this topic should be encouraged because of the ready opportunity for well-designed comparative cultural studies.

Psychopharmacology

It is noteworthy that interest in ethnopharmacology has grown considerably in the last decade. Much of the current research on the topic has

been generated by Lin and his colleagues at the NIMH-funded research project on ethnopharmacology based at UCLA (see Lin & Finder, 1983; Lin, Poland, & Lesser, 1986; Lin, Poland, Anderson, & Lesser, chapter 20, this volume). Kinzie, Leung, Boehnlein, and Fleck (1987) discussed the use of antidepressants in Southeast Asian patients. Jaranson (1991) also offered a summary of his medication experiences with refugee populations. However, there have no been no carefully controlled experimental studies of psychoactive treatments of trauma victims from different ethnocultural backgrounds.

One of the few clinical studies on the topic was an open trial of clonidine and imipramine in Cambodian PTSD patients conducted by Kinzie and Leung (1989). They reported that 68 severely traumatized Cambodian refugee patients who suffered from chronic PTSD and major depression improved symptomatically when treated with a combination of clonidine, an alpha-2 adrenergic agonist, and imipramine—a tricyclic antidepressant. In addition, a prospective study of 9 Cambodian PTSD patients (aged 31–64 yrs) using this combination resulted in improved symptoms of depression among 6 patients, 5 of whom improved to the point that DSM-III-R diagnoses were no longer applicable.

Kinzie and Leung concluded that clonidine and imipramine reduced, but did not eliminate, hyperarousal symptoms, intrusive thoughts, nightmares, and startle reactions in their Cambodian patients. They felt the imipramine–clonidine combination was well tolerated and should be explored further in treating severely depressed and traumatized patients. Freimer, Lu, and Chen (1989) reported the use of amobarbital interviews with a 23-year-old male Laotian refugee veteran whose symptoms and clinical course fit DSM–III–R criteria for combat-related disorder and PTSD. They noted that the patient was more responsive following three amobarbital interviews, and this provided diagnostic information that helped treatment through expanded use of suggestion and abreaction.

Summary

With the exception of the Parson (1990) report, there have been no systematic efforts to develop alternative forms of psychotherapy that are applicable to distinct ethnocultural groups of PTSD victims. The use of indigenous methods holds some promise for future treatment; however, it will be necessary to conduct rigorous experimental studies (i.e., control groups) to test the efficacy of these methods. Most reports of psychotherapy with PTSD victims from different ethnocultural groups have explored Western methods, making adjustments for certain ethnocultural traditions. Much the same can be said of the psychopharmacology reports on PTSD among different ethnocultural groups. What is needed now are experimental studies with double-blind crossover designs to test the effects of psy-

choactive medications on members of different ethnocultural groups suffering from PTSD. There are no current publications that offer information on differential treatments (i.e., dosage, medications, side effects, titration levels).

SOME BASIC CONSIDERATIONS IN CONDUCTING ETHNOCULTURAL RESEARCH ON PTSD

Ethnocentricity

The study of ethnocultural aspects of PTSD can provide insight into a number of important dimensions of the problem including the role of ethnocultural variables in the etiology, epidemiology, diagnosis, expression, treatment, and prevention of PTSD. However, it is critical that the insidious risks of ethnocentricity be closely monitored in cross-cultural studies of PTSD. As in many other psychiatric disorders, virtually all of the theory, research, and measurement on PTSD has been generated by Euro-American, European, Israeli, and Australian researchers and professionals. When this knowledge is applied to members of these cultural traditions, issues of cross-cultural validity and reliability are not as serious a problem because the concepts and approaches are consistent with Western cultural traditions. However, when these concepts and approaches are applied indiscriminately to members of non-Western cultural traditions, including ethnic minority members who still practice or are identified with non-Western cultural traditions, there are serious risks of ethnocentric bias.

Ethnocentricity can be defined in this context as the tendency to view one's own way of thinking or behaving as the right, correct, or moral way, and to reject all others as incorrect or of limited accuracy or value. As a result of ethnocentric bias, concepts and methods of measurement of PTSD may have only limited cross-cultural relevancy and usefulness. Ethnocentrically biased concepts do not encompass or include the experiences of non-Western people, particularly with regard to their notions of health, illness, personhood, and normality, as well as their expressions of symptomatology and phenomenological experiences of disorders such as PTSD.

Definition of Culture

Kluckholm & Murray (1957), stated, "Every man is like all other men, like some other men, and like no other man" (p. 10). The wisdom of these words is obvious. All human beings share a common biological heritage that makes them all similar. But, it is also true that human beings belong to thousands of different ethnocultural groups, each of which shapes both the content and process of individuals' acquired learning. It is also true that each human being is unique because of the specific interactions of their biological, psychological, and cultural natures. Thus, in the process of dealing with PTSD and other psychiatric disorders, we are dealing with at least three different dimensions of human nature—universal, cultural, and personal uniqueness.

Marsella (1988) has defined culture as

shared learned behavior which is transmitted from one generation to another to promote individual and group adjustment and adaptation. Culture is represented externally as artifacts, roles, and institutions, and is represented internally as values, beliefs, attitudes, cognitive styles, epistemologies, and consciousness patterns. (p. 10)

Ethnocultural Identity

Within the last decade, increased interest in and support for the concept of diversity and cultural pluralism has resulted in a greater use of ethnocultural identity as the principal independent variable in cross-cultural research. Marsella (1990) has defined ethnocultural identity as

the extent to which an individual or group is committed to both endorsing and practicing a set of values, beliefs, and behaviors which are associated with a particular ethnocultural-cultural tradition. (p. 12)

Among ethnocultural minorities, the variations in behavior within a given ethnocultural group are dramatic and profound, and any effort to group people together for research on the basis of the largest possible ethnocultural dimension (e.g., Arab, Asian, Black, Hispanic) contributes excessive error variance to the design. Even within these larger categories, the shared culture may be minimal because of geographical, genetic, and psychocultural variation. In brief, researchers must emphasize the variations and patterns within an ethnocultural tradition and heritage, and not simply use general racial or national category when conducting cross-cultural research. For instance, researchers should not group data according to large variables such as "Japanese," but rather break the group down into subgroups according to the extent to which they, for example, embrace or endorse traditional practices and behaviors.)

The emergence of highly diverse and pluralistic cultures has led to discontent with older views of ethnocultural identity that posited linear notions of acculturation and assimilation (i.e., each new generation becomes progressively more Euro-American). These views considered the dominant ethnocultural majority as being the end point toward which all

ethnocultural minorities were striving. Today, we recognize that there are a number of social statuses for minorities who do not acculturate to the majority culture, including acculturated, bicultural, marginal, anomic, deviant, and multicultural. In addition, emphasis is now placed on multiculturalism, including multiple identities that emerge in response to situation demands and prerequisites.

If research on ethnocultural identity is to progress and replace or complement our current reliance on broader racial and ethnic categories (i.e., Arab, Asian, Black, Hispanic), it is critical that efforts be made to develop valid and reliable methods for assessing ethnocultural identity. There are a number of different ways for assessing ethnocultural identity (e.g., Marsella, 1991).

Equivalency in Assessment

If measurement concepts and methods are to be valid when applied across cultures, it is necessary to meet certain requirements regarding equivalency in language, concepts, scales, and norms. By equivalency, the authors are referring to the extent to which these topics are similar among the different cultural groups under study. There are four types of equivalency that are important in psychiatric assessment, including linguistic, conceptual, scale, and normative equivalence (e.g., Marsella & Kameoka, 1989). If measures are not equivalent, validity is questionable.

Ethnosemantic Methods

If the measures being used in a study do not meet the equivalency challenges, a researcher may want to consider developing instruments for the culture under study. This can be done through the use of ethnosemantic methods, a series of techniques that have long been established in anthropology to reduce ethnocentricity and bias. Marsella (1987) outlined the ethnosemantic procedures and steps for the measurement of depressive affect and experience. However, the procedures and steps are relevant to the study of any concept (e.g., PTSD, emotion, health). The value of this approach is that it begins with the subjective experience of the respondent rather than the assumptions of the researcher. This helps reduce ethnocentricity and bias resulting from the use of culturally insensitive and inappropriate materials and procedures. For example, it cannot be assumed that anxiety, as we define and measure it in the Western world, is applicable to the world of the African tribal member. It is not simply a question of translation, it is a question of worldview and the implications that different worldviews may have for understanding human behavior.

CONDUCTING CROSS-CULTURAL STUDIES OF PTSD

Epidemiology

In assessing the incidence and the prevalence of PTSD and related psychiatric disorders, it is important to consider ethnocultural variations in the definition and expression of the disorders. If standard psychiatric definitions (DSM–III–R/ICD-10) are to be used for case inclusion, it is possible that false positives and false negatives will enter into the rates, resulting in erroneous and potentially pernicious conclusions. For example, if researchers are studying traditional American Indian populations living on reservations, and they are using DSM–IV standards, they may misdiagnose cases. In such situations it is necessary to use idioms of distress and indigenous concepts to determine an accurate rate of disorder. Several publications have addressed the problems associated with cross-cultural epidemiology (e.g., Marsella, 1978; Marsella, Sartorius, Jablensky, & Fenton, 1986); these offer detailed suggestions for conducting cross-cultural epidemiology studies.

Recommended Clinical Studies of PTSD

There are a number of research strategies that can be used to conduct clinical research studies of PTSD and related disorders across ethnic and racial groups. These include symptom frequency (explore symptom frequencies of standard psychiatric and indigenous symptoms among cohorts or samples from different ethnocultural groups); matched diagnosis (explore symptom profiles among populations from different ethnocultural groups who share a common diagnosis of PTSD or a related disorder); international survey (conduct surveys of symptomatology and other clinical parameters of patients with PTSD from different countries); and matched samples (explore symptom profiles and other clinical phenomenology of PTSD by comparing its presence in matched samples from different ethnocultural groups). In this last instance, the emphasis is placed on matching for age, gender, education, social class, and so forth to reduce the variance associated with these variables in general population studies.

Other approaches include indigenous symptom expressions and folk disorders (study the symptomatological expressions in non-Western populations via investigations of culture-specific disorders such as latah, koro, and susto, and folk expressions and symptom metaphors such as heavy heart, soul loss, shaking stomach, and brain fag); and factor analytic approaches (use factor analysis to empirically derive the structure of symptom patterns among different ethnocultural groups). Furthermore, rather than accepting existing Western notions about symptom clusters, researchers can admin-

ister symptom checklists to different ethnocultural groups and then submit the responses to factor analyses for each of the groups studied. The factorial structures or symptom clusters then can be compared using factorcomparison methods to determine the degree of similarity. This method offers the chance to determine ethnocultural variations in symptom patterns empirically rather than accepting a priori notions based on Western assumptions and experiences.

CONCLUSION

Ethnocultural studies of PTSD offer an opportunity to identify the universal and the culture-specific aspects of the PTSD experience by comparing ethnocultural group differences in the distribution, expression, and treatment of PTSD. Identifying these differences can help clinicians adjust their practices and procedures to accommodate to the shared and the unique aspects of the PTSD experience.

There have been numerous studies of PTSD that have examined ethnocultural aspects of PTSD rates, expressions, and treatment regimens. These studies have investigated different (a) ethnocultural groups (e.g., Afro-American, Indochinese); (b) victim populations (e.g., refugees, veterans, victims of natural disaster); (c) traumatic events (e.g., Vietnam War, rapes, and other crimes); and (d) clinical topics (e.g., epidemiology, expression patterns, alternative therapies). The results of these studies are generally consistent with the results of existing biological research that suggests there is a universal biological response to traumatic events that involves psychophysiological activation and disregulation of the adrenergic, opioid, hypothalamic-pituitary-adrenal systems, with attendant clinical symptomatology. It has also been speculated that there are permanent changes in the structure and neurochemical response patterns of the locus coeruleus. However, whereas the response to a traumatic event may share some universal features, especially when a trauma is more severe, ethnocultural factors may play an important role in the individual's vulnerability to PTSD, the expression of PTSD, and the treatment responsivity of PTSD. The sociocultural construction of reality cannot be ignored. Notions of personhood, social support system patterns, and concepts of health and disease are all cultural factors that may mediate PTSD.

Limitations in the cross-cultural sensitivity of much of the existing ethnocultural research constrains our knowledge about culture-specific aspects of PTSD. Some researchers have suggested that whereas intrusive thoughts and memories of a traumatic event may transcend cultural experiences, the avoidance/numbing and hyperarousal symptomatology may be highly determined by ethnocultural affiliation. In addition, ethnocultural factors may be important determinants of vulnerability to trauma (by

shaping concepts of what constitutes a trauma); personal and social resources for dealing with traumas; early childhood experiences; exposure to multiple trauma; premorbid personality; disease profiles (e.g., substance abuse and alcoholism); and treatment options that successfully contain and control the trauma experience.

The measurement of PTSD remains a serious problem because the existing instruments often do not include indigenous idioms of distress and causal conceptions of PTSD and related disorders. For example, it is widely known that many non-Western ethnic groups present symptoms somatically rather than psychologically or existentially. Since somatization symptoms are not broadly sampled in many of the PTSD measurement instruments, it is possible that important ethnocultural variations are not being considered. In addition, of course, there are problems of norms, scale formats, translation of materials, and the appropriateness of concepts.

Therapeutic approaches to PTSD have taken a variety of psychotherapeutic and psychopharmacologic forms. While these have generated some interesting hypotheses and some avenues for more extensive exploration, there has been a dearth of well-controlled therapy studies that would enable us to reach scientific conclusions about the treatment of PTSD in different ethnocultural groups. A promising area of inquiry appears to be the use of indigenous healing ceremonies for treating traumas in indigeneous populations.

Existing studies provide an opportunity for generating and testing critical hypotheses about the role of ethnocultural factors in PTSD. With the careful application of accepted crosscultural research methods and the use of more experimentally controlled studies, future research will enable us to understand the role of ethnocultural factors in the etiology, expression, and treatment of PTSD.

Not all victims of trauma develop PTSD. Furthermore, some develop it immediately whereas others develop a delayed syndrome. There is also a need for more research among ethnocultural minority populations to identify the sources of strength and resiliency that somehow mediate the onset, course, and outcome of PTSD. One wonders if there are certain philosophical or religious beliefs, social interaction patterns, or personal dispositions and personality orientations that may be critical mediators of PTSD among certain ethnocultural groups.

Exposure to an extreme and brutalizing traumatic event may override ethnocultural variations. However, there are people exposed to the same traumatic event who do not develop PTSD in any of its forms. Is there something that people who do not develop PTSD have learned—something within their ethnocultural experience—that can provide an inoculating effect? More and better research on ethnocultural aspects of PTSD is needed to answer this question.

REFERENCES

- Allen, I. (1986). Post-traumatic stress disorders among Black Vietnam veterans. Hospital and Community Psychiatry, 37, 55-61.
- Allodi, F. (1991). Assessment and treatment of torture victims: A critical review. Journal of Nervous & Mental Disease, 179, 4-11.
- American Psychiatric Association (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, DC: American Psychiatric Press.
- American Psychiatric Association (1987). Diagnostic and statistical manual of mental disorders (3rd ed., rev.). Washington, DC: American Psychiatric Press.
- Arredondo P, Orjucla E., & Moore L: Family therapy with Central American war refugee families. Journal of Strategic and Systematic Therapies, 8, 28–35, 1989
- Arthur, R. Psychiatric syndromes in prisoners of war and concentration camp survivors. In C. Fiemann & R. Faquet (Eds.), Extraordinary disasters and human behavior. New York, Plenum Press.
- Barse H. (1984, April 19). Post traumatic stress disorder and the American Indian Vietnam Veteran. Stars and Stripes, p. 1.
- Baumgartner, D. (1986). Sociodrama and the Vietnam combat veteran: A therapeutic release for a wartime experience. *Journal of Group Psychotherapy*, *Psychodrama*, and *Sociometry*, 39, 31–39.
- Becerra, R. (1982). The Hispanic Vietnam veterans: Mental health issues and therapeutic approaches. In R. Becerra & K. Escobar (Eds.), Mental Health and Hispanic-Americans. (pp. 169–180). New York: Grune & Stratton.
- Becker, M. (1963). Extermination camp syndrome. New England Journal of Medicine, 269, 1145.
- Beiser M. (1991). Mental health of refugees in resettlement countries. In W. Holtzman & T. Borneman (Eds.), Mental Health of Immigrants and refugees (pp. 51-65). Austin, TX: Hogg Foundation.
- Beiser M., Turner, R., & Ganesan, S. (1989). Catastrophic stress and factors affecting its consequences among Southeast Asian refugees. Social Science & Medicine, 28, 183–189.
- Boehnlein, J. (1987a). Clinical relevance of grief and mourning among Cambodian refugees. Social Science & Medicine, 25, 763–762.
- Boehnlein, J (1987b). Culture and society in post-traumatic stress disorder: Implications for psychotherapy. American Journal of Psychotherapy, 41, 519–530.
- Boehnlein, J., Kinzie D., Rath, B., & Fleck, J. (1985). One year follow-up study of post-traumatic stress disorder among survivors of Cambodian concentration camps. *American Journal of Psychiatry*, 142, 958–968.
- Breslau N, Davis G, Andreski, P., Peterson, E. (1991). Traumatic events and post-traumatic stress disorder in an urban population of young adults. Archives of General Psychiatry, 48, 216–222.

- Carter, J. (1982). Alcoholism in Black Vietnam veterans: Symptoms of post-traumatic stress disorder. *Journal of the National Medical Association*, 74, 655–660.
- Cervantes, R. C., Salgado de Snyder, V., & Padella, A. M. (1989). Posttraumatic stress in immigrant from Central America and Mexico. Hospital and Community Psychiatry, 40, 615–619.
- de Girolamo, G. (1992). International perspectives on the treatment and prevention of post traumatic stress. In J. Wilson & B. Raphael (Eds.), *International handbook of traumatic stress syndromes*. (pp. 935–946). New York: Plenum Press.
- de Girolamo, G., Diekstra, R., & Williams C: Report of a visit to border encampments on the Kampuchea-Thai Border. Geneva, Switzerland, World Health Organization.
- de Girolamo, G., & Orley, J. (1992). Psychosocial consequences of disasters: Prevention and management. Geneva, Switzerland: Division of Mental Health, World Health Organization.
- de la Fuente, R. (1990). The mental health consequences of the 1985 earthquakes in Mexico. *International Journal of Mental Health*, 19, 21–29.
- Derogaitis, L. (1983). SCL-90-R manual. Towson, MD: Clinical Psychometric Research.
- Dobkin de Rios, M., & Friedman, J. (1987). Hypnotherapy with Hispanic burn patients. International Journal of Clinical and Experimental Hypnosis, 35, 87–94.
- Eitenger, L. (1960). The symptomatology of mental disease among refugees in Norway. *Journal of Mental Science*, 106, 947–966.
- Eitenger, L. (1964). Concentration camp survivors in Norway and Israel. London: Allen & Unwin.
- Eitenger, L., & Grunfeld, B. (1966). Psychoses among refugees in Norway. Acta Psychiatrica Scandinavica, 42, 315–328.
- Escobar, J., Randolph, E., Puente, G., Spivak, F., Asamen, J., Hill, M., & Hough, R. (1983). Post-traumatic stress disorders in Hispanic Vietnam vets: Clinical phenomenology and sociocultural characteristics. *Journal of Consulting & Clinical Psychology*, 52, 79–87.
- Freimer, N., Lu, F., & Chen, J. (1989). Post-traumatic stress and conversion disorders in a Laotian refugee veteran: Use of amobarbital interviews. *Journal of Nervous & Mental Disease*, 177, 432–433.
- Friedman, M., & Jaranson, J. (1992). The applicability of the PTSD concept to refugees. In A. J. Marsella, T. Borneman, S. Ekblad, & J. Orley (Eds.) Amidst peril and pain: The mental health and social wellbeing of the world's refugees (pp. 207–228). Washington, DC: American Psychological Association.
- Friedman, M., Marsella, A. J., Ashcraft, M., Keane, T., Manson, S. (1992). The Matsunaga Study: Clinical and epidemiological studies of American Indian, Native Hawaiian, and Japanese American Vietnam War veterans. Project Technical Re-

- port #1. National Center for PTSD, VA ROMC, White River Junction, Vermont, 1992
- Garcia-Peltoniemi, R. (1992a). Clinical manifestations of psychopathology in refugees. In J. Westermeyer, C. Williams, & N. Nguyen (Eds.), Refugee mental health and social adjustment: A guide to clinical and preventive services (pp. 42–55). Washington, DC. Government Printing Office.
- Garcia-Peltoniemi, R. (1992b). Epidemiological perspectives. In J. Westermeyer, C. Williams, & N. Nguyen (Eds.), Refugee mental health and social adjustment: A guide to clinical and preventive services (pp. 24–41). Washington, DC: Government Printing Office.
- Gaw, A. (1992). Culture, ethnicity, and mental illness. Washington, DC: American Psychiatric Press.
- Goldfeld, A., Mollica, R., Pesavento, R., & Faraone, S. (1988). The physical and psychological sequelae of torture. *Journal of the American Medical Association*, 259, 2725–2729.
- Green, B., Grace, M., Lindy, J. & Leonard, A. (1991). Race differences in response to combat stress. *Journal of Traumatic Stress*, 3, 379–393.
- Hamada, R., Chemtob, C., Sautner, R., & Sato, R. (1988). Ethnic identity and Vietnam: A Japanese–American Vietnam veteran with PTSD. Hawaii Medical Journal, 47, 100–109.
- Hathaway, S., & McKinley, R. (1970). Minnesota multiphasic personality inventory. Minneapolis, MN: University of Minnesota.
- Holen, A. (1990). A long-term outcome study of survivors from a disaster. Oslo, Norway: University of Oslo Press.
- Holm, T. (1982). Indian veterans of the Vietnam War: Restoring harmony through tribal ceremony. Four Winds, 3, 34–37.
- Holm, T. (1989). Warriors all: 170 American Indian Vietnam Era veterans. Tucson, AZ: University of Arizona.
- Jaranson, J. (1990). Mental health treatment of refugees and immigrants. In W. Holtzman & T. Bornemann (Eds.), Mental health of immigrants and refugees (pp. 207–215). Austin, TX: Hogg Foundation.
- Jaranson, J. (1991). Psychotherapeutic medication. In Mental health services for refugees (pp. 132–145). Washington DC: US Department of Health and Human Services.
- Jordan, K., Schlenger, W., Hough, R., Kulka, R., Weiss, D., Fairbank, J., & Marmar, C. (1991). Lifetime and current prevalence of specific psychiatric disorders among Vietnam veterans and controls. Archives of General Psychiatry, 48, 207–215.
- Kettner, B. (1972), Combat strain and subsequent mental health: A follow-up of Swedish soldiers serving in the United Nations armed forces in 1961–62. Acta Psychiatrica Scandinavica Supplementum, 230, 1–112.
- Kim, K. (1987). Severely battered wives: Clinical manifestations and problems in Korea. International Journal of Family Psychiatry, 8, 387-414.

- King, D., & King, L. (1991). Validity issues in research on Vietnam veteran adjustment. Psychological Bulletin, 109, 107–124.
- Kinzie, D. (1985). Cultural aspects of psychiatric treatment with Indochinese patients. American Journal of Social Psychiatry, 1, 47–53.
- Kinzie, D. (1989). Therapeutic approaches to traumatized Cambodian refugees. Journal of Traumatic Stress, 2, 75–91.
- Kinzie, D., Boehnlein, J., Leung, P., & Moore, L. (1990). The prevalence of PTSD and its clinical significance among Southeast Asian refugees. *American Journal of Psychiatry*, 147, 913–917.
- Kinzie, D., & Fleck, J. (1987). Psychotherapy with severely traumatized Cambodian refugees. American Journal of Psychotherapy, 41, 82–94.
- Kinzie, D., Frederickson, R., Rath, B., Fleck, J., & Karls, W. (1984). Post-traumatic stress disorder among survivors of Cambodian concentration camps. *American Journal of Psychiatry*, 141, 645-650.
- Kinzie, D., & Leung, P. (1989). Clonidine in Cambodian patients with PTSD. Journal of Nervous & Mental Disease, 177, 546-550.
- Kinzie, D., Leung, P., Boehnlein, J., Fleck, J. (1987). Tricyclic antidepressant blood levels in Southeast Asians: Clinical and cultural implications. *Journal of Nervous & Mental Disease*, 175, 480–485.
- Kinzie, D., Tran K., Breckenridge, A., & Bloom J. (1980). An Indochinese refugee clinic: Culturally accepted treatment approaches. *American Journal of Psychiatry*, 137, 1429–1432.
- Kleinman, A, & Good, B. (Eds.). (1986). Culture and depression. Los Angeles: University of California Press.
- Kluckhohn, C, Murray H. (1957). Personality in nature, culture and society. New York: Basic Books.
- Krippner, S., & Colodzin, B. (1989). Multicultural methods of treating Vietnam veterans with PTSD. *International Journal of Psychosomatics*, 36, 79–85.
- Kroll, J., Habenicht, M., MacKenzie, T., & Yang, M. (1989). Depression and post-traumatic stress disorders in Southeast Asians. *American Journal of Psychiatry*, 146, 1592–1597.
- Krupinski, J., Stoller, A., & Wallace, L. (1973). Psychiatric disorders of Eastern European refugees in Australia. Social Science & Medicine, 7, 31–49.
- Kulka, R., Schlenger, W., Fairbank, J., Hough, R., Jordan, K., Marmar, C., & Weiss, D. (1990). Trauma and the Vietnam War generation. New York: Brunner/Mazel.
- Laufer, R., Gallops, M., & Frey-Wouters, E. (1984). War stress and trauma: The Vietnam veterans experience. *Journal of Health and Social Behavior*, 18, 236–244.
- Lee, E. (1988). Cultural factors in working with Southeast Asian refugee adolescents. *Journal of Adolescence*, 11, 167–179.
- Lee, E., & Lu, F. (1989). Assessment and treatment of Asian-American survivors of mass violence. *Journal of Traumatic Stress*, 2, 93-120.

- Lima, B., Pai, S., Santacruz, H., & Lozano, J. (1991). Psychiatric disorders among poor victims following a major disaster: Armero, Columbia. *Journal of Nervous & Mental Disease*, 179, 420–427.
- Lin, E., Ilhe, L. & Tazuma, L. (1985). Depression among Vietnamese refugees in a primary care clinic. American Journal of Medicine, 78, 41-44.
- Lin, K., & Finder, K. (1983). Neuroleptic dosages for Asians. American Journal of Psychiatry, 140 480-491.
- Lin, K., Poland, R., & Lesser, M. (1986). Ethnicity and psychopharmacology. Culture, Medicine, & Psychiatry, 10 151–165.
- Lin, K., & Shen, W. (in press). Pharmacotherapy for Southeast Asian psychiatric patients. *Journal of Nervous & Mental Disease*.
- Lopez, A., Boccellari, A., & Hall, K. (1988). Post-traumatic stress disorder in a Central American refugee. Hospital and Community Psychiatry, 39, 1309–1311.
- Malt, U. (1988). The long term psychiatric consequences of accidental injuries: A longitudinal study of 107 adults. *British Journal of Psychiatry*, 153, 810–818.
- Malt, U., Blikra, G., & Hoivik, B. (1989). The three year biopsychosocial outcome of 551 hospitalized accidentally injured adults. *Acta Psychiatrica Scandinavica Supplementum*, 355, 84–93.
- Marsella, A. J. (1978). Thoughts on cross-cultural studies on the epidemiology of depression. Culture, Medicine, & Psychiatry, 2, 343-357.
- Marsella, A. J. (1979). Cross-cultural studies of mental disorders. In A. J. Marsella, R. Tharp, & T. Ciborowski (Eds.), *Perspectives on cross-cultural psychology* (pp. 233–264). New York: Academic Press.
- Marsella, A. J. (1987). The measurement of depressive experience and disorder across cultures. In A. J. Marsella, M. Katz, & R. Hirschfield (Eds.), The measurement of depression (pp. 376–398). New York: Guilford.
- Marsella, A. J. (1988). Cross-cultural research on severe mental disorders: Issues and findings. Acta Psychiatrica Scandinavica Supplementum, 344, 7–22.
- Marsella, A. J. (1991). Ethnocultural identity: The "new" independent variable in cross-cultural research. Focus: Newsletter of The American Psychological Association Minority Division, 3, 7–8.
- Marsella, A. J., & Kameoka, V. (1989). Ethnocultural issues in the assessment of psychopathology. In S. Wetzler (Ed.). Measuring mental illness: Psychometric assessment for clinicians (pp. 229–256). Washington, DC: American Psychiatric Press.
- Marsella, A. J., & White, G. (1982). Cultural conceptions of mental health and therapy. Boston: G. Reidel.
- Marsella, A. J., Chemtob, C., & Hamada, R. (1990). Ethnocultural aspects of PTSD in Vietnam War veterans. *National Center for Post-Traumatic Stress Disorder Clinical Newsletter*, 1, 1–3.
- Marsella, A. J., Friedman, M., & Spain, H. (1992). A selective review of the literature on ethnocultural aspects of PTSD. PTSD Research Quarterly, 2, 1-7.

- Marsella, A. J., Friedman, M., & Spain, H. (1993). Ethnocultural aspects of PTSD: An overview of issues, research, and directions. In J. Oldham, A. Tasman, & M. Riba (Eds.), *Review of psychiatry* (pp. 157–181). Washington, DC: American Psychiatric Press.
- Marsella, A. J., Sartorius, N., Jablensky, A., & Fenton, F. (1986). Cross-cultural studies of depression: An overview. In A. Kleinman & B. Good (Eds.), Culture and depression (pp. 229–324). Los Angeles: University of California Press.
- Mollica, R. (1988). The trauma story: The psychiatric care of refugee survivors of violence and torture. In F. Ochberg (Ed.), Post-traumatic therapy and victims of violence (pp. 295–314). New York: Brunner/Mazel.
- Mollica, R., & Lavelle, J. (1988). The trauma of mass violence and torture: An overview of psychiatric care of the Southeast Asian refugee. In L. Comas-Diaz & E. Griffith (Eds.), Clinical practice in cross-cultural mental health (pp. 262–304). New York: John Wiley.
- Mollica, R., Wyshak, G., & Lavelle, J. (1987). The psychosocial impact of war trauma and torture on Southeast Asian refugees. *American Journal of Psychiatry*, 144, 1567–1572.
- Mollica, R., Caspi-Yavin, Y., Bollini, P., Truong, T., Tor, S., & Lavelle, J. (1992). The Harvard Trauma Questionnaire: Validating a cross-cultural instrument for measuring torture, trauma, and PTSD in Indochinese refugees. *Journal of Nervous & Mental Disease*, 180, 111–116.
- Moore, L., & Boehnlein, J. (1991). Post-traumatic stress disorder, depression, and somatic symptoms in U.S. Mien patients. *Journal of Nervous & Mental Disease*, 179, 728–733.
- National Center for PTSD. (1991). Selected Abstracts of European PTSD Literature. National Center for PTSD Research Quarterly 2, 1-7.
- Nicassio, P. (1985). The psychosocial adjustment of the Southeast Asian refugee. Journal of Cross-Cultural Psychology, 16, 153-173.
- Niem, T. (1989). Treating Oriental patients with Western psychiatry: A 12 year experience with Vietnamese refugee psychiatric patients. Psychiatric Annals, 19, 648–652.
- Ostwald, P., & Bittner, E. (1968). Life adjustment after severe persecution. American Journal of Psychiatry, 124, 1393-1400.
- Parson, E. (1984). The "gook" identification and post-traumatic stress disorders in Black Vietnam veterans. Black Psychiatrists of America Quarterly, 11, 14–18.
- Parson, E. (1985). Ethnicity and traumatic stress: The intersecting point in psychotherapy. In C. Figley (Ed.), *Trauma and its wake: The study and treatment of PTSD* (pp. 314–337). New York: Brunner/Mazel.
- Parson, E. (1990). Post-traumatic psychocultural therapy (PTpsyCT): Integration of trauma and shattering social labels of the self. *Journal of Contemporary Psychotherapy*, 20, 237–258.
- Pedersen, P., Sartorius, N., & Marsella, A. J. (1984). Mental health services: The cross-cultural contest. Beverly Hills, CA: Sage.

- Penk, W. & Allen, I. (1991). Clinical assessment of post-traumatic stress disorder (PTSD) among American minorities who served in Vietnam. *Journal of Traumatic Stress*, 4, 41–66.
- Penk, W., Robinowitz, R., Dorsett, D., Bell, W., & Black, J. (1989). Post-traumatic stress disorder: Psychometric assessment and race. In T. Miller (Ed.), Stressful life events (pp. 525–552). Madison, CO: International Universities Press.
- Perry, R. (1986). Minority citizens and disasters. Athens, GA, University of Georgia Press.
- Pina, G. (1985). Diagnosis and treatment of PTSD among Hispanic Vietnam veterans. In S. Sonneberg, A. Blank, & J. Talbott (Eds.), *The trauma of war* (pp. 389–402). Washington, DC: American Psychiatric Press.
- Rosser, R. (1986). Reality therapy with the Khmer refugees resettled in the United States. *Journal of Reality Therapy*, 6, 21–29.
- Rozee, P., & Van Boemel, G. (1989). The psychological effect of war trauma and abuse on older Cambodian women. Women and Therapy, 8, 23–50.
- Silver, S. (1984). Worth of the warrior project. Readjustment Counseling Service, Veterans Administration Central Office, Washington, DC, 20420.
- Silver, S., & Wilson, J. (1990). Native American healing and purification rituals for war stress. In J. Wilson, Z. Harel, & B. Kahanal (Eds.), *Human adaptation to stress: From the Holocaust to Vietnam*. New York: Plenum.
- Solomon, K. (1989). The dynamics of post-traumatic stress disorder in South African political detainees. *American Journal of Psychotherapy*, 43, 208–217.
- Solomon, Z. (1989). Psychological sequelae of war: A three year prospective study of Israeli combat stress reaction casualties. *Journal of Nervous & Mental Disease*, 177, 342–346.
- Solomon, Z., & Mikulincer, M. (1987). Combat stress reactions, PTSD, and social adjustment: A study of Israel veterans. *Journal of Nervous & Mental Disease*, 175 277–285.
- Solomon, Z., Oppenheimer, B., & Noy, S. (1986). Subsequent military adjustment of combat stress reaction casualties: A nine year follow-up study. *Military Medicine*, 151, 8–11.
- Solomon, Z., Weisenberg, M., Schwarzwald, J., & Mikulincer M. (1987). PTSD among frontline soldiers with combat stress reaction: The 1982 Israeli experience. American Journal of Psychiatry, 144 448-453.
- Streimer, J., Cosstick, J., & Tennant, C. (1985). The psychosocial adjustment of Australian Vietnam veterans. American Journal of Psychiatry, 142, 616–618.
- Stretch, R. (1990). Post traumatic stress disorder and the Canadian Vietnam veteran. *Journal of Traumatic Stress*, 3, 239–254.
- Stretch, R. (1991). Psychosocial readjustment of Canadian Vietnam veterans. Journal of Consulting & Clinical Psychology, 59, 188–189.
- Summerfield. D., & Toser, L. (1991). "Low intensity" war and mental trauma in Nicaragua: A study in a rural community. Medicine & War, 7, 84–89.

- Tennant, C., Streimer, J., & Temperly, H. (1990). Memories of Vietnam: Post-traumatic stress disorders in Australian veterans. Australian & New Zealand Journal of Psychiatry, 24, 29–39.
- Urrutia, G. (1986). Mental health problems of encamped refugees: Guatemalan refugees in Mexican camps. Bulletin of the Menninger Clinic, 51, 170–185.
- Weisaeth, L. (1989). The stressors and the post-traumatic stress syndrome after an industrial disaster. Acta Psychiatrica Scandinavica Supplementum, 355, 25–37.
- Weisaeth, L., & Eitinger, L. (1991). Research on PTSD and other post-traumatic reactions: European literature. *National Center for PTSD Research Quarterly*, 2, 1–7.
- Westermeyer, J. (1988). Mental health for refugees and other migrants. Chicago: Charles C. Thomas.
- Westermeyer, J. (1989). Cross-cultural care of PTSD: Research, training, and service needs for the future. *Journal of Traumatic Stress*, 2, 515–536.
- Westermeyer, J., & Wahmemholm, K. (1989). Assessing the victimized psychiatric patient: Special issues regarding violence, combat, terror and refuge seeking. Hospital & Community Psychiatry, 3, 245–249.
- Westermeyer, J., Williams, C., & Nguyen, N. (Eds.). Refugee mental health and social adjustment: A guide to clinical and preventive services. Washington DC: Government Printing Office.
- Williams, C., & Westermeyer, J. (Eds). (1986). Refugee mental health in resettlement countries. Washington, DC: Hemisphere.
- World Health Organization (1992). The ICD-10 classification of mental and behavioral disorders. Geneva, Switzerland: Author.